CLAIMS

I claim:

1. A method for supplying power to a powered device which is adapted to receive power selectably from a battery and a configurable power supply, said method comprising:

acquiring information about power requirements of said powered device;

analyzing the acquired information;

determining the power requirements of the powered device based on the acquired information; and

adapting said configurable power supply to supply power to said powered device according to the determined power requirements of the powered device.

2. The method as claimed in Claim 1, comprising storing the contents of a look-up table, wherein said determined power requirements are derived by comparing said acquired information with entries in said look-up table.

3. A method for determining the type of a powered device, comprising:

analyzing the dynamic load characteristics of a powered device upon power up of the powered device; and

identifying the type of the powered device by comparing the analyzed dynamic load characteristics with templates of dynamic load characteristics of known powered devices.

4. The method as claimed in Claim 3, wherein said types of known powered devices include battery powered telephones and battery powered computers.

5. The method as claimed in Claim 3, wherein said powered device is adapted to receive power selectably from a battery and a configurable power supply, said method further comprising:

acquiring information about power requirements of the determined powered device;

analyzing the acquired information, and determining the power requirements of the powered device based on the acquired information; and

supplying power to said powered device according to the determined power requirements.

6. A method for selecting and applying a proper operating voltage for a powered device, comprising:

sampling battery voltage of a battery associated with said powered device;

providing a reference voltage;

comparing said sampled battery voltage and said reference voltage;

adjusting said reference voltage and selecting a value of said reference voltage that most closely matches said sampled battery voltage; and

powering said powered device from a power source having an output voltage equal to said selected value of said reference voltage in the absence of a battery connected to said powered device.

7. The method as claimed in Claim 6, comprising:

providing a visual indication signifying that said sampled battery voltage and said adjusted reference voltage are most closely matched.

8. The method as claimed in Claim 7, comprising:

choosing the next higher value of reference voltage when said sampled battery voltage is in between two values of reference voltages, one value being below said sampled battery voltage and one value being above said sampled battery voltage.

9. The method as claimed in Claim 6, comprising:

protecting said power source from being inadvertently connected to said battery.

10. A method for determining the power requirements of a powered device adapted to receive power selectably from a battery and a configurable power supply, comprising:

preloading said battery with a resistive load;

varying said resistive load on said battery;

detecting the extent of voltage sag upon preloading said battery;

analyzing said detected voltage sag and determining the anticipated fully charged battery voltage; and

supplying the appropriate voltage to the powered device from said configurable power supply in the absence of said battery.

11. A computer readable medium embodying program instructions for supplying power to a powered device which is adapted to receive power selectably from a battery and a configurable power supply, comprising:

acquiring information about power requirements of said powered device;

analyzing the acquired information;

determining the power requirements of the powered device based on the acquired information; and

adapting said configurable power supply to supply power to said powered device according to the determined power requirements of the powered device.

12. The computer readable medium as claimed in Claim 11, comprising storing the contents of a look-up table, wherein said determined power requirements are derived by comparing said acquired information with entries in said look-up table.

13. A computer readable medium embodying program instructions for determining the type of a powered device, comprising:

analyzing the dynamic load characteristics of a powered device upon power up of the powered device; and

identifying the type of the powered device by comparing the analyzed dynamic load characteristics with templates of dynamic load characteristics of known powered devices.

14. The computer readable medium as claimed in Claim 13, wherein said types of known powered devices include battery powered telephones and battery powered computers.

15. The computer readable medium as claimed in Claim 13, wherein said powered device is adapted to receive power selectably from a battery and a configurable power supply, further comprising:

acquiring information about power requirements of the determined powered device;

analyzing the acquired information, and determining the power requirements of the powered device based on the acquired information; and

supplying power to said powered device according to the determined power requirements.

16. A computer readable medium embodying program instructions for selecting and applying a proper operating voltage for a powered device, comprising:

sampling battery voltage of a battery associated with said powered device;

providing a reference voltage;

comparing said sampled battery voltage and said reference voltage;

adjusting said reference voltage and selecting a value of said reference voltage that most closely matches said sampled battery voltage; and

powering said powered device from a power source having an output voltage equal to said selected value of said reference voltage in the absence of a battery connected to said powered device.

17. The computer readable medium as claimed in Claim 16, comprising:

providing a visual indication signifying that said sampled battery voltage and said adjusted reference voltage are most closely matched.

18. The computer readable medium as claimed in Claim 17, comprising:

choosing the next higher value of reference voltage when said sampled battery voltage is in between two values of reference voltages, one value being below said sampled battery voltage and one value being above said sampled battery voltage.

19. The computer readable medium as claimed in Claim 16, comprising:

protecting said power source from being inadvertently connected to said battery.

20. A computer readable medium embodying program instructions for supplying power to a powered device which is adapted to receive power selectably from a battery and a configurable power supply, comprising:

preloading said battery with a resistive load;

varying said resistive load on said battery;

detecting the extent of voltage sag upon preloading said battery;

analyzing said detected voltage sag and determining the anticipated fully charged battery voltage; and

supplying the appropriate voltage to the powered device from said configurable power supply in the absence of said battery.